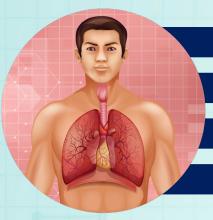


North Eastern Council (NEC),
Ministry of Development of North Eastern Region,
Government of India

Mobile AI Enabled Respiratory Screening



329 Million affected by COPD globally

19.5 lakh TB cases

65 Million in India live with COPD

5 lakh TB-related deaths in India

General Lung Health: Spirometry+ Audiometric Analysis using Respiratory Problem: Yes/No Machine Learning Pattern: Obstructive/Restrictive Severity: High/Medium/Low FEV1 and FEC FEV1/FEC Ratio General Lung Health: Rich Data **Wet Cough Count** Cough Sounds **Dry Cough Count** Lung Health Index (LHI®) Cough & Energy Plots **Spectrograms Disease Prediction** COVID-19 Machine Learning Pulmonary TB Respiratory COPD Tens of thousands of Questionnaire **Bronchitis Data Points** Asthma Pneumonia **ILD**













OUTCOMES - NORTH EAST'S SDG 2030 GOALS

S. No.	Parameter	Impact
1.	SDG 3 - Good Health and Well Being	 ✓ Reduce Cost of Treatment . ✓ Reduce Out of Pocket especially travel and accommodation costs for Diagnostics Tests in other cities / states. ✓ Improves Quality Of Community Health Screening In Remote Areas. ✓ At Home Long Term Care of Senior Citizens With Multiple Co Morbidities. ✓ Helps overcome treatment barriers on account of lack of availability / limited availability of Doctors / Medical Technicians / Expensive Machinery.
2.	SDG 4 – Quality Education	 ✓ Train Youth From the Northeast In Next Generation Telecom Ecosystem for self-employment/job opportunities etc. ✓ Improved Quality of Teaching By Healthcare / Educational Institutions by enabling the use of immersive learning tools like AR/VR/MR etc. ✓ MOOC Courses to remove barriers to access to knowledge in an emerging knowledge economy.
3.	SDG 5 – Gender Equality	Open New Economic Opportunities for Women (Special focus community healthcare / agriculture / handloom & handicrafts). * Report of GSMA [Global System for Mobile Communications] says that there is a considerable gender gap in mobile ownership (14%) and mobile internet use (41%) wherein lack of awareness and digital skills are among the top barriers to mobile internet adoption and usage among women.
4.	SDG 9 - Industry, Innovation & Infrastructure	 ✓ SME Ecosystem to Make, Repair, Recycle Next Generation Products Like IoT Devices. ✓ 5G Labs can be used for local youth for innovations.
5.	SDG 12 - Responsible Consumption &	 ✓ Promote Recycling of E Components. ✓ Reduce GHG (Green House Gas Emissions) since 5G Equipment's consume less energy compared to earlier Generation of Equipment's.

Production